Getting Started
with the MiniMed® 530G Insulin Pump

PUMP Foundations
WARNING: If insulin, or any liquid, gets inside the tubing connector, it can temporarily block the vents that allow the pump to properly fill the infusion set. This may result in the delivery of too little or too much insulin, which can cause hypoglycemia or hyperglycemia. To prevent liquid from getting inside the tubing connector, after you fill the reservoir make sure you hold the insulin vial upright when you remove the reservoir from the transfer guard. If you do not hold the insulin vial upright, insulin can get on the top of the reservoir and could transfer liquid into the tubing connector. If any liquid gets on the top of the reservoir or inside the tubing connector when you change your infusion set, start over with a new reservoir and infusion set. For more information, please see “Tubing Connector”, located in the Introduction chapter of the MiniMed 530G System User Guide.

Record safety information from your healthcare provider:
# Getting Started with the MiniMed® 530G Insulin Pump

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Getting Started with the
MiniMed® 530G Insulin Pump

Welcome, and thank you for choosing Medtronic as a partner in managing your diabetes. You have made a great choice and have just purchased the latest advancement in insulin technology. We are pleased to be a part of your healthcare team.

Whether this is the first time you are using an insulin pump or you have “pumping” experience, you will want to learn how your new MiniMed 530G insulin pump works. This guide provides step-by-step instructions on the basic operations and programming of your pump.

Please use your pump to complete each practice exercise. Be sure you are not attached to your pump while you practice. The exercises are presented in a logical sequence. Completing them in order will help you build your pump skills and knowledge. Practicing these exercises will prepare you to use your pump with ease and confidence. Additional training will be provided during your pump start training session.

Here are some quick tips to keep in mind. As you practice, avoid selecting the “Reservoir + Set” menu as doing so may cause you to get stuck in the reservoir setup process. Other than that, it’s okay if you make a mistake. Your pump automatically returns to the HOME screen (if you do not touch a button for 30 seconds). The key allows you to backup to the previous screen if you push the wrong button. Have fun as you practice!

IMPORTANT Do not attach the insulin pump to your body or attempt to use insulin in the pump while learning to navigate the pump screens during your self-study. Using the pump, with either saline or insulin, should only be done when you have been instructed to do so by your healthcare provider and have received formal training with a Certified Product Trainer.

DID YOU KNOW? A complete explanation of the technical and operational aspects of your pump can be found in the MiniMed® 530G User Guide.
Pump Mechanics and the Delivery of Insulin

Before we begin, let’s make sure you know how insulin is delivered when using an insulin pump. The parts that make up the pump’s delivery system are the infusion set, the reservoir, and the pump.

**Infusion Set**

The infusion set consists of tubing (1) that transports insulin from the pump to you. On one end of the tubing is the tubing connector (2) that attaches to the reservoir. On the other end is the insertion site section (3) that attaches to you.

The insertion site section has a tiny tube (cannula) (4) that goes into your skin. Insulin is delivered through the cannula. A small piece of adhesive (5) surrounds the insertion site and holds the infusion set in place.

**Reservoir**

The reservoir is similar to a syringe and generally holds a 2- to 3-day supply of insulin. The reservoir fits into the pump’s reservoir compartment (6). You will change the infusion set and fill a new reservoir with insulin every 2 to 3 days.

**Pump**

The pump contains a mini computer and motor that controls the movement of a piston, located at the bottom of the reservoir compartment. The piston acts like a plunger rod on a syringe and precisely controls the delivery of basal and bolus insulin.

Each time the pump delivers insulin, the piston moves forward and pushes up on the bottom of the reservoir to deliver the exact amount of insulin that was programmed. The piston must be re-wound each time a newly-filled reservoir is placed into the reservoir compartment.

*Quick-set* infusion set shown in illustration.
Section 1:

Pump Basics

What’s on Your Insulin Pump

Before inserting the battery or pressing any buttons, let’s take a closer look at your pump and become familiar with all of its features. Please use your pump and follow along.

The Front of Your Pump

- **Pump Screen**: Displays all of the information needed to operate and program your pump.
- **Pump Buttons**: Five buttons, each with specific function(s), operate the pump.

The Back of Your Pump

- **Diagram of (AAA) Battery**: Shows direction of battery insertion.
- **Pump Model Number**
- **Pump Serial Number**: You will need to provide this number if you call the HelpLine or to sign up for CareLink®.

Medtronic Diabetes 24-Hour HelpLine Telephone Number
Trained product experts are available to assist you 24 hours a day, 7 days a week.
The Reservoir and Battery Compartments

Battery Compartment
The battery is inserted here.

Reservoir Compartment
A reservoir holding a 2- to 3-day supply of insulin is inserted here.

The Reservoir Window and Piston

Reservoir Window
Provides a view of the insulin remaining in your reservoir.

Piston
The piston is located inside the reservoir compartment

Drive Support Cap
Should appear slightly indented at all times.

WARNING: Do not press on the drive support cap if it is sticking out. Pushing on it may result in unintended delivery of insulin, which can cause hypoglycemia.

NOTE The pump ships with a red cap in the reservoir compartment (not shown on this page). Leave the red cap in place for now.
Section 2:

Inserting the Battery

Your insulin pump is powered by a AAA battery. To insert a battery, you will need a thick coin (nickel or quarter).

Step 1. Place the edge of the coin in the slot of the battery cap. Turn the cap to the left (counter-clockwise) until it comes off.

Step 2. Place battery into the battery compartment with negative (flat) end of the battery in first and positive end facing out.

Step 3. Replace the cap. Use the coin to turn the cap to the right (clockwise) and tighten until the slot is horizontal, but be careful not to overtighten!

Step 4. The pump should power-up. It will cycle through several screens and then display the HOME screen, as shown above. If the HOME screen displays, your battery is good, and it is inserted correctly. If the HOME screen does not display, follow the steps on the “Possible Battery Problems” page in the Appendix.

IMPORTANT
Be careful not to overtighten the battery cap!

DID YOU KNOW?
Energizer® Alkaline AAA batteries are recommended. Tests show they are the most reliable battery to use in the pump. Batteries should be stored at room temperature, not in the refrigerator or other cold locations.

NOTE Please do not set the time and date yet. We will explain how to do this later in the guide.

Energizer® is a registered trademark of Eveready Battery Company.
Section 3:
The HOME Screen

Everything Starts Here

When a working battery is inserted, the insulin pump is ON and the HOME screen will display. The HOME screen always displays the reservoir icon, the time, and the battery icon. All the other screens and menus are accessed from the HOME screen. The pump “rests” on the HOME screen.

The pump returns to the HOME screen if no buttons are pressed for 30 seconds.

<table>
<thead>
<tr>
<th>Reservoir Icon</th>
<th>Time</th>
<th>Battery Icon</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Reservoir Icon" /></td>
<td><img src="image" alt="Time" /></td>
<td><img src="image" alt="Battery Icon" /></td>
</tr>
<tr>
<td>Shows you approximately how much insulin is left in your reservoir.</td>
<td>Shows the time.</td>
<td>Shows you approximately how much battery life is left.</td>
</tr>
<tr>
<td>The Low Reservoir warning allows you to program the pump to alert before your reservoir is empty. The warning works the same for both the 180 unit and the 300 unit reservoirs.</td>
<td></td>
<td>The icon is divided into four sections; each section represents about 25% of the battery life.</td>
</tr>
<tr>
<td>The icon is divided into four sections; each section represents about 25% of a full reservoir.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: If using a 180 unit reservoir in a 300 unit reservoir MiniMed 530G insulin pump, then the reservoir icon will appear as follows.

NOTE: If the pump screen is blank (with no icons), your pump is not ON. See the “Possible Battery Problems” page in the Appendix.
Section 4:
The Pump Buttons

Each button on your pump has a special function. Some buttons have more than one function. These additional functions depend on which screen or menu you are using.

<table>
<thead>
<tr>
<th>UP arrow</th>
<th>DOWN arrow</th>
<th>ACT button</th>
<th>ESC button</th>
<th>B button</th>
</tr>
</thead>
</table>
| • Used to scroll up through the items on a menu  
• Used to increase or change the value of flashing items | • Used to scroll down through the items on a menu  
• Used to decrease the value of a flashing number  
• Turns the screen backlight ON or OFF if pressed from the HOME screen | • Opens menus  
• Accepts, confirms, or activates menu selections | • Allows you to return to the previous screen or exit  
• Opens the STATUS screen if pressed from the HOME screen | • Also called the Express Bolus button  
• Shortcut to the SET BOLUS screen  
• Shortcut to Bolus Wizard® feature (when it is on)  
• Used with other keys to access certain features |
Practice Exercises

Use your pump to perform the following practice exercises.

In all practice exercises throughout this chapter, when you see the word:
• “Press”: Push and release the button
• “Hold”: Press and maintain pressure on the button

Practice Exercise 1: Learning to Use the Pump Buttons

1. From the Home Screen:
   Press ACT to open the Main Menu.

2. Press the V and A arrows to scroll through the menu.

3. Press ESC to return to the HOME screen.

Practice Exercise 2: Turning the Backlight ON and OFF

1. From the Home Screen:
   Press the V arrow. The backlight turns ON.

2. Press the V arrow again. The backlight turns OFF.

NOTE Do not use sharp objects like your fingernails, a pen, or a pencil to press the buttons on your pump. This can damage your keypad.
Practice Exercise 3: Delivering a Practice Bolus

1. From the Home Screen:
   Press the SET BOLUS button. The SET BOLUS screen appears with 0.0 flashing.

![SET BOLUS screen with 0.0 U]

2. Press the△ button five times to set a 0.5 unit bolus.

![SET BOLUS screen with 0.5 U]

3. Press theAct button to confirm. The pump will beep one time as it starts to deliver the bolus in 0.025 unit increments or amounts.

   The pump will beep again when it has finished delivering the bolus. Then it will return to the HOME screen.

   Congratulations! You have just delivered your first practice bolus. Keep in mind, you will normally deliver a bolus using the Bolus Wizard feature.

NOTE: Each time the△ button is pressed, the bolus amount will increase by 0.1 units (unless the pump settings have been changed in the BOLUS MENU).
## Section 5:

### Modes of Operation

Your insulin pump runs or operates in one of three modes: Normal, Special, or Attention.

A circular icon is displayed on the screen if the pump is operating in any mode other than the normal mode. An example of the alert icon that displays during each mode of operation is shown below.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Normal</strong></td>
<td>The pump is operating and delivering insulin as programmed. When the pump is operating in normal mode, it means there are no special features being used and there are no active alarms or alerts.</td>
</tr>
<tr>
<td><strong>Special</strong></td>
<td>The pump is operating and delivering insulin using a special feature or under a special condition such as a temporary basal setting, low battery, or low reservoir volume. The pump will sound a beep or vibrate to remind you that it is operating in the Special mode (the frequency of the alert will depend on the condition).</td>
</tr>
<tr>
<td><strong>Attention</strong></td>
<td>The pump is not delivering insulin. This occurs if the pump is placed in SUSPEND or another condition has caused the pump to stop. The pump will beep or vibrate periodically to notify you that you are not receiving insulin (the frequency of the alert will depend on the condition).</td>
</tr>
</tbody>
</table>
Section 6:

The STATUS Screen

This screen allows you to quickly view information about your insulin pump’s operating status. It is continuously updated and shows the most current information about:

- U100 – The type of insulin used in your pump
- Current basal rate
- Reservoir start date
- Units left in reservoir
- Battery status (normal or low)
- Date
- Serial number
- Version of software your pump is using
- Active Insulin*
- Last bolus delivered*
- Date of last reservoir change*

* information only appears once bolus feature and reservoir setup menu have been used.

Active insulin can also be found in the Estimated Details screen when using the Bolus Wizard® to program a bolus and when setting a manual bolus if the Bolus Wizard has settings entered. Consult with your healthcare provider for recommendations on how to use Active Insulin information when setting a manual bolus.

The STATUS screen can be accessed by pressing \( \text{ESC} \) from the HOME screen. Please refer to the MiniMed 530G System User Guide for more information.

Practice Exercise: Viewing the STATUS Screen

1. From the Home Screen:
   Press \( \text{ESC} \). The STATUS screen appears.

2. Use the \( \text{V} \) and \( \text{A} \) arrows to scroll through and look at your STATUS screen.

   To return to the HOME screen, \( \text{ESC} \)
Section 7:

Reading the Menus and Screens

There are six primary menus. Each menu contains the features and options that pertain to that menu. For example, if you are looking for a function related to bolus delivery, go to the BOLUS MENU; if you are looking for a basal rate function, go to the BASAL MENU. Each menu is set up so that the features that are used most often are closest to the top of the menu.

The Pump Screen

Your insulin pump screen can display up to five lines of information at one time.

- **Line 1**: Always displays the reservoir icon, time, and battery icon.
- **Line 2**: Always displays the name of the menu that you are currently viewing (MAIN, BOLUS, SUSPEND, SENSOR, etc.).
- **Lines 3, 4, and 5**: Shows first three selections on the menu.

The Scroll Bar

When a screen or menu has more than five lines of information, a scroll bar appears on the right side of the screen to let you know there is more information available. When you see the scroll bar on your screen, use the \( \vee \) arrow to scroll down and view the remaining information.
More About The MAIN MENU

The MAIN MENU allows you to choose one of these six menus:

- **Bolus**: Contains the options and features related to boluses.

- **Suspend**: Allows you to manually interrupt insulin delivery. This is commonly used when disconnecting to take a shower, change clothes, or swim.

- **Sensor**: Contains selections that refer to our continuous glucose monitoring product (this information is not covered in this workbook).

- **Basal**: Contains all of the selections related to basal rate delivery.

- **Reservoir + Set**: Contains selections needed for changing the infusion set, reservoir, and insulin.

- **Utilities**: Contains a variety of other options such as alert type and BG meter linking setup.

Each menu (Bolus, Sensor, Basal, Reservoir + Set, and Utilities) has a sub-menu that contains additional options and features related to that menu.

Press to Scroll down to see all options on MAIN MENU
Practice Exercise 1: Viewing the MAIN MENU

1. From the HOME screen:
   Press ACT. The MAIN MENU appears. Notice the scroll bar on the right side of the screen.

2. Use arrow to view all of the options on the MAIN MENU.

3. Press to return to the HOME screen.

Practice Exercise 2: Accessing the BOLUS MENU

1. From the HOME screen:
   Press ACT. The MAIN MENU appears, and Bolus is highlighted.

2. Press ACT. The BOLUS MENU appears, and Set Bolus is highlighted. Notice that there is no scroll bar, as there are only three options in this menu.

3. Press twice to return to the HOME screen.
Practice Exercise 3: Accessing the BASAL MENU

1. From the HOME screen:
   Press \texttt{ACT}, and the MAIN MENU appears.

2. Use $\texttt{v}$ to highlight Basal.

3. Press \texttt{ACT}, and the BASAL MENU appears. Notice that there is no scroll bar, as there are only three options in this menu.

4. Press \texttt{ESC} twice to return to the HOME screen.

Here’s a tip! When you are viewing any screen other than the HOME screen, $\texttt{v}$ functions only as a down button and does not turn on the backlight. To turn the backlight on when you are in another screen or menu, you will need to use a new technique called the “dual press.”

Practice Exercise 4:
Turning the backlight ON when NOT on the HOME screen

1. From the HOME screen:
   Press \texttt{ACT}. The MAIN MENU appears.

2. To turn the backlight on, hold $\texttt{B}$ and press $\texttt{v}$ at the same time. The backlight should turn on.

3. Hold $\texttt{B}$ and press $\texttt{v}$ to turn the backlight off.
Basic Menu Map

Navigation

Press \textbf{ACT} from the \textit{HOME} screen to open the \textit{MAIN MENU}.

Press \textbf{ACT} on item from the \textit{MAIN MENU} to open the sub-menus.

Press \textbf{ESC} to go back to each of the previous menus until you return to the \textit{HOME} screen.

The scroll bar appears on menus to indicate when additional text is available.

Press \textbf{V} to scroll down to view additional screen text.

Press \textbf{A} to scroll back up.

\begin{itemize}
\item \textbf{BOLUS}
\item \textbf{SUSPEND}
\item \textbf{SENSOR}
\item \textbf{BASAL}
\item \textbf{RESERVOIR + SET}
\item \textbf{UTILITIES}
\end{itemize}

\begin{itemize}
\item \textbf{BOLUS MENU}
\item \textit{SET BOLUS}\footnote{Displays only when the Bolus Wizard\textsuperscript{®} feature is off.}
\item \textbf{BOLUS HISTORY}
\item \textbf{BOLUS SETUP}
\end{itemize}

\begin{itemize}
\item \textbf{MANUAL SUSPEND MENU}
\item \textbf{PRESS ACT TO STOP}
\end{itemize}

\begin{itemize}
\item \textbf{SENSOR MENU}
\item \textbf{EDIT SETTINGS}
\end{itemize}

\textbf{NOTE:} This diagram shows the basic options that are available on each menu when the pump is shipped from the factory.

An expanded menu that shows all features and options can be found in the Appendix.
Status Screen

Press \( \text{ESC} \) from the HOME screen to access the STATUS MENU.

---

**STATUS U100**

- Basal 1: .025U/H
- Reservoir Started: 12JAN, 12:00A
- Units left: 176.2U
- Time left: --:--
- Battery: Normal
- Mon 01 JAN 2007
- S/N# 123456
- Paradigm 551
- RC2 1.0A 1.1 OB OB

---

**BASAL MENU**
- SET/EDIT TEMP BASAL
- BASAL REVIEW
- BASAL SETUP

**RESERVOIR + SET MENU**
- RESERVOIR SETUP
- FILL CANNULA
- HISTORY

**UTILITIES MENU**
- LOCK KEYPAD
- ALARM
- DAILY TOTALS
- TIME / DATE
- ALARM CLOCK
- CONNECT DEVICES
- BLOCK
- SELFTEST
- USER SETTINGS\(^2\)
- CAPTURE OPTION
- LANGUAGE

---

\(^2\) Displays only when you hold \( \text{HOLD} \) and press \( \text{MEM} \).
Section 8:

Learning to Program Your Pump

Now you are ready to program some basic features on your insulin pump. This will help you learn more about how your pump works and let you practice using the buttons.

The UTILITIES MENU

Scroll \( \downarrow \) to find the UTILITIES MENU. It is the last option on the MAIN MENU. We will start here.

The UTILITIES MENU has many options that allow you to customize your pump. You will learn which features are best for you to use immediately and which features you may want to use later.

First, we will scroll through and view the options that are available on the UTILITIES MENU. Then we will select and program some of the features.

Practice Exercise: Viewing the UTILITIES MENU

1. From the HOME screen:
   Press \( \text{ACT} \), and the MAIN MENU appears.

2. Press \( \uparrow \) and scroll to Utilities.

3. Press \( \text{ACT} \), and the UTILITIES MENU appears.

4. Use \( \uparrow \) and \( \downarrow \) to scroll through the UTILITIES MENU.

5. Press \( \text{ESC} \) twice to return to the HOME screen.
At the beginning of each exercise you will see the following “shorthand” used. This is a quick way to list the steps you need to follow to reach each menu.

HOME Screen > MAIN MENU > Utilities

Selecting and Setting Alerts

Your insulin pump is easy to use and very safe. The pump constantly performs a series of safety checks to ensure that it is working properly. If it detects any condition that requires your attention, it will beep or vibrate to alert you of the situation.

Examples of common alerts you will receive include:

- **Low Battery Alert**: Alerts when only 10% of battery life remains
- **Low Reservoir Alert**: Alerts when the insulin reservoir is low
- **Manual Suspend**: Alerts every 15 minutes when the pump is in suspend

**NOTE** Your pump is shipped with the audible beep alert activated, but you can choose to set it to vibrate if you prefer.

**Practice Exercise: Setting the Alert Type**

HOME Screen > MAIN MENU > Utilities

1. From the UTILITIES menu:
   Press \( \checkmark \) to Alarm and press \( \text{Act} \). Alarm menu appears.

2. Press \( \checkmark \) to Alert Type and press \( \text{Act} \). Alert Type appears.
3. Use ‹ or ‣ to listen to the alerts.

![Image of ALERT TYPE screen]

4. Select the alert you prefer: Beep (long, medium, short) or Vibrate.

5. Press ACT to confirm your choice. Your alert type is now set!

6. Press C three times to return to the HOME screen.

**Setting the Time and Date**

Setting the correct time and date on your insulin pump is important.

Let’s set the time and date on your pump now.

![Image of UTILITIES screen]

**Practice Exercise: Setting the Time and Date**

The pump will go through a series of screens as you set the time and the date. Use ‣ and ‹ to set the flashing values and then press ACT to confirm each selection.

**HOME Screen > MAIN MENU > Utilities**

1. From the UTILITIES menu:
   - Scroll ‣ to Time/Date and press ACT.

![Image of UTILITIES MENU screen]

2. Select 12-hour (AM/PM) or 24-hour (military time) and press ACT.
Setting the Time and Date

3. Press \textbf{ACT} to change the Time/Date.

4. Use \textbf{V} and \textbf{A} to set the hour. Make sure you scroll through the hours until AM or PM time is set correctly.

5. Press \textbf{ACT} to set.

6. Repeat steps 4 and 5 to set the minutes, year, month, and day.

\begin{center}
\includegraphics[width=0.5\textwidth]{time_date_set.png}
\end{center}

The first time you set the time and date, the following prompt will appear: “If time and date are correct, highlight Yes and press \textbf{ACT}.”

A CHECK SETTINGS alarm will also sound; clear the alarm by pressing \textbf{ESC} and then \textbf{ACT}.
The Basal Menu

In the BASAL MENU, you can program basal rates, change and review basal rates, set a temporary basal rate, and set the maximum basal amount.

When you program a basal rate into your pump, that exact amount will automatically deliver each hour.

When you first start on your insulin pump, you will most likely start with just one basal rate. The pump will deliver that exact basal amount evenly, over each hour, 24 hours a day. For example, if your starting basal rate is 0.500 units (½ unit) an hour, your pump will deliver a ½ unit each hour, 24 hours a day. This means you would receive a total of 12 units of basal insulin each day.

Your healthcare provider will determine your starting basal rate. When you check your BG (blood glucose) as instructed, your BG readings will help you and your healthcare provider determine if the basal rate amount is correct, if it needs to be adjusted, or if you need more than one basal rate.

If your BG readings indicate that you need more than one basal rate, additional rates can easily be added.

The first example on the next page shows how a single basal rate might be written and how it would deliver each hour.

The second example shows how multiple basal rates might be written and how they would be delivered each hour.

For basal insulin...

Jill always had to remember to take her shot at bedtime prior to having her insulin pump. Taking a shot at the same time every night as instructed by her doctor was difficult to do. Jill is in college and some nights she would go to bed early, other nights she would be studying at the library until late. Now that her doctor has prescribed a pump, she doesn't have to worry about when she takes her shot. She receives her basal insulin automatically, 24 hours a day.
The basal rates shown here are for illustration purposes only. Your healthcare provider will determine the right basal rates for you.
Setting a Single Basal Rate

The Start Time for the first basal rate is pre-set at midnight and cannot be changed. As soon as Basal Rate 1 is programmed into the pump, it begins to deliver each hour from midnight to midnight.

Practice Exercise: Setting a Single Basal Rate

HOME Screen > MAIN MENU > Basal

1. From the BASAL MENU:

2. Set/Edit Basal is highlighted. Press Act.

3. SET BASAL RATE 1 appears with the time preset at 12:00 A and the rate 0.000 flashing.

4. Press and hold ▲ to set the first basal rate amount to 0.500 u/h. If you go past 0.500 units, use ▼ to take you back to 0.500 units. The basal rate will increase by 0.025 units with each press.

IMPORTANT: Double check that you have set the right rate. For example, if you want to set “0.5”, be careful not to set “0.05”.
5. Press [ACT] to confirm the practice Basal Rate at 0.500 u/h.

6. SET START TIME 2 screen displays. (In this exercise you are only setting one basal rate, so you do not need to set a start time for the second basal rate.)

7. Press [ACT], and the BASAL RATE screen appears, showing:
   - Current Rate .500 U/H
   - Started #1 – 12:00A
   - 24 Hr. Total 12.00 U

   In this example, the 24-hour total is 12.00 U. This is the total amount of basal insulin that your pump will deliver over 24 hours when the basal rate is set at 0.500 units per hour.
Setting Multiple Basal Rates

Now that you have learned to set one basal rate, let’s learn how to program multiple basal rates.

Practice Exercise: Setting Multiple Basal Rates

HOME Screen > MAIN MENU > Basal

1. From the BASAL MENU:
   Scroll to Basal Setup and press ACT.

2. Set/Edit Basal is highlighted. Press ACT.

3. SET BASAL RATE 1 appears.

4. Press ACT to confirm that the 0.500 rate is correct and that you do not want to change the amount of that rate.

5. SET START TIME 2 appears with dashes flashing in the upper left corner. The flashing dashes indicate that the START-TIME for the 2nd basal rate needs to be programmed here.

6. Set the following start times and basal rates as practice using ▲ and ▼. Press ACT, to confirm each time and rate:

   a. Start Time 2: 3:00 AM Rate: 0.800 U/H
When the dashes for START TIME 4 appear, press ACT.

8. The BASAL RATE screen appears, showing the current rate, the time the current rate started delivering, and the 24 Hr. Total, which in this example is 15.750U.

**Needing more than one basal rate...**

When Matt was on insulin shots, he would wake up in the morning with low BGs. Now that Matt has his insulin pump, it is programmed according to his doctor’s prescribed settings to deliver less insulin when he is sleeping so that his BGs aren't low when he wakes up.

**Helpful hint:** Most people need more than one basal rate to get the best control with their pump. Work with your healthcare provider to get your basal rates adjusted correctly when you start on pump therapy.
Looking at the Basal Review Screen

Your insulin pump has another great feature that allows you to review the basal rates you have set in your pump. Basal Review is found on the BASAL MENU.

Let’s review the basal rates you just entered.

Practice Exercise: Looking at the Basal Review Screen

HOME Screen > MAIN MENU > Basal

1. From the BASAL MENU:
   Scroll to Basal Review and press ACT.

2. STANDARD (basal review) appears, showing the 24-hour total and each basal rate:

   ![Basal Review Screen]

3. Press ESC three times to return the HOME screen.

You can also look at your STATUS screen to see which basal rate is currently being delivered. To do this:

1. Press ESC from the HOME screen to view the STATUS screen.

2. Scroll to see which basal rate is currently running and the amount that is being delivered each hour.
Erasing Basal Rates

If you would like additional practice setting basal rates, you can erase the basal rate you just set. Once erased, you can repeat the practice exercises or make up other basal rates to review programming your pump.

Practice Exercise: Erasing Basal Rates

HOME Screen > MAIN MENU > Basal

1. From the BASAL MENU:
   Scroll to Basal Setup and press Act.

2. Set/Edit Basal is highlighted.

3. Press Act and SET BASAL RATE 1 appears.

4. Press ▼ until the rate is set to 0.000 U/H.

5. Press Act.

6. When SET START TIME 2 appears, press ▼ to set the time to (--:--) and press Act.

7. BASAL RATE: Current Rate screen appears.

   The 24-hour total should now read: 24 Hr. Total 0.000U. Your basal rates have been erased.
Section 9:

Delivering Boluses

A bolus is given for two reasons: to cover food that contains carbohydrate or to correct glucose levels that are above your target range.

The insulin pump allows you to access the bolus feature in a number of different ways. This section covers how to deliver a bolus using the Set Bolus feature found in the Bolus Menu and the Express Bolus button.

Practice Exercise 1: Delivering a 0.5 U Bolus

HOME Screen > MAIN MENU > Bolus

1. From the BOLUS MENU:
   Set Bolus is highlighted. Press ACT.

2. SET BOLUS screen appears with 0.0 u flashing.

3. Press △ 5 times to set a bolus amount of 0.5 u (½ of a unit).

4. Press ACT to confirm the amount and deliver the bolus.

Please note: Your pump delivers insulin in 0.025 unit increments. Watch as the screen counts up in 0.025 increments (i.e., 0.025; 0.050; 0.075; 0.100, etc.) until the half-unit bolus of insulin is delivered.

Your pump will beep once when it has finished delivering a bolus. It will then return to the HOME screen.

DID YOU KNOW?
As you deliver boluses, the amount of active insulin that is being tracked by your pump is displayed on the lower left corner of the screen.

NOTE The pump beeps once when it begins to deliver a bolus and beeps again when it has finished. It then returns to the HOME screen.
Express Bolus Button

The Express Bolus or \[\text{button}\] button is the method you will probably use most frequently when giving a bolus. It is easy and convenient to use because the button is located on the front of your insulin pump.

When the Express Bolus button is pressed from the HOME screen, the SET BOLUS screen immediately opens with 0.0 U flashing, ready for you to enter the bolus amount. Once the Bolus Wizard® feature is turned on, you will use the \[\text{button}\] button to access the Bolus Wizard calculator.

Practice Exercise 1: Using the \[\text{Button}\] Button to Deliver a Bolus

1. From the HOME screen: Press \[\text{The SET BOLUS screen appears with 0.0 U flashing.}\]
2. Use \[\text{to set a 1.0 unit bolus (1 unit).}\]
3. Press \[\text{to confirm and deliver the one-unit bolus.}\]
4. Watch as your pump delivers the bolus. It will beep once and return to the HOME screen when it has finished.
The Bolus Wizard

The Bolus Wizard is a feature that calculates the amount of bolus insulin you need when you enter your current BG reading and the amount of carbs you are about to eat. The Bolus Wizard uses your individualized settings provided by your healthcare provider to estimate your bolus insulin amount. These settings include your Carb Ratio, Insulin Sensitivity Factor, BG Target Range, and Active Insulin Time.

By counting carbs and using the Bolus Wizard, you are able to give the right amount of insulin for your food and correction bolus. This can help to keep your glucose levels better controlled.

Using the Bolus Wizard:

Test and enter BG.

Enter grams of carbohydrates to be eaten.

Displays estimated amount of insulin to be delivered.

You will learn more about using the Bolus Wizard when you meet with your trainer.

Using the Bolus Wizard...

Larry is so excited that his insulin pump has made his glucose management easier. Before his pump he had to try to calculate on his own how much insulin he needed. Now, his meter sends his BG to his pump, he enters his carbs, and the pump calculates and recommends the bolus amount.

Helpful hint: After you begin pump therapy, testing your BG two hours after meals will help you determine if your Bolus Wizard settings are correct. If your BG is too high or too low, your healthcare provider can help you adjust your settings to help you achieve better glucose control.
**BOLUS HISTORY Screen**

The BOLUS HISTORY screen is a great record keeping feature. It records the date, time, amount, and type of every bolus delivered. The last 24 boluses can be viewed in the BOLUS HISTORY screen. The most recent bolus is displayed first.

Let’s look at the BOLUS HISTORY screen and review the boluses that you have given.

**Practice Exercise 1: Viewing the Bolus History**

**HOME Screen > MAIN MENU > Bolus**

1. From the BOLUS MENU:
   Press \( \text{▼} \) to scroll Bolus History and press \( \text{Act} \).

2. The BOLUS HISTORY screen appears.

3. Use \( \text{▼} \) and \( \text{▲} \) to scroll through and review the boluses that you have given.

*Shows the last 24 boluses delivered*

---

**DID YOU KNOW?**

Your pump also keeps the most recent bolus that was given on the STATUS screen. This makes it easy for you to quickly check the time and amount of your last bolus.

To view the last bolus that was given on your pump, press \( \text{ESC} \) from the HOME screen to go to the STATUS screen.
You can see the details of the last 24 boluses by viewing the BOLUS DETAIL screen.

Practice Exercise 2: Viewing Bolus History Details

1. Follow the steps on the preceding page to access the BOLUS HISTORY screen.

2. Use \( \uparrow \) and \( \downarrow \) to select the bolus you want to review and press \( \text{ACT} \).

3. The details of that bolus will be displayed.

4. Press \( \text{ESC} \) to return to the BOLUS HISTORY screen. To see the details on other boluses, simply use \( \uparrow \) and \( \downarrow \) to select the bolus and press \( \text{ACT} \).

5. Press \( \text{ESC} \) (4 times) to return to the HOME screen.
Section 10:

Manually Suspending Insulin Delivery on Your Pump

The manual SUSPEND Feature

Although you should never interrupt or stop the insulin delivery on your pump for more than an hour or so, there will be times when you will want to manually SUSPEND your pump and disconnect it from your infusion site. There are several reasons you might manually suspend and disconnect from your pump which include the following:

- **Bathing or Swimming**

Manually suspending the basal rate and removing your pump is commonly done for showering, bathing and water activities. Infusion sets are designed so you can easily disconnect from your pump and tubing and leave it in a safe, dry place.

Talk to your healthcare provider about a plan including BG checks and possible correction boluses when disconnecting and reconnecting to your pump.

**Helpful hint:** While the pump is manually suspended, it will beep or vibrate every 15 minutes.

**WARNING:** Do not use your pump in water, such as when bathing, or wear it during water activities and showering. The pump is not water-tight and it may become damaged if it is used in water.
• **Interrupting or Stopping a Bolus**

There may be times when you want to stop or interrupt a bolus. The pump is designed to allow you to easily interrupt the delivery of a bolus by setting the pump in manual SUSPEND.

### More About manual SUSPEND

When the pump is in manual SUSPEND, all insulin delivery stops until you resume delivery yourself.

**Basal Insulin**

When you take the pump out of manual SUSPEND and have it RESUME, basal insulin will begin to deliver again. *Any basal insulin that was missed while the pump was in manual SUSPEND will not be delivered.*

**Bolus Insulin**

When you interrupt a bolus, the bolus insulin that has already been delivered prior to setting the pump in manual SUSPEND is the only insulin that will be delivered for that bolus. *When you RESUME insulin delivery, the amount of bolus insulin that was not delivered before the pump was placed into manual SUSPEND will not be delivered.*

---

**NOTE** There is another SUSPEND feature called THRESHOLD SUSPEND that is available when you are using continuous glucose monitoring (CGM). You will learn more about THRESHOLD SUSPEND during your continuous glucose monitoring training. For more information, refer to the MiniMed 530G System User Guide and Getting Started with Continuous Glucose Monitoring for the MiniMed 530G with Enlite. For safety, do not use the Threshold Suspend feature until you have been trained, read all instructions, and have discussed its use with your healthcare provider.
Practice Exercise 1: Setting the Pump in manual SUSPEND

1. From the HOME screen:
   Press Act to access the MAIN MENU.

2. Press V to highlight Suspend.

3. Press Act; the screen flashes SUSPEND.

4. Press Act to confirm you want to place the pump in Suspend.

5. SUSPEND appears on the pump screen. The time your pump was stopped is shown directly above SUSPEND, and the alarm icon (solid black circle) is displayed between the reservoir icon and the time. After 30 seconds (to conserve battery power), the pump returns to the HOME screen.

6. Press ESC to look at your Status screen. Notice that the first information on your Status screen tells you that the pump is in suspend and shows the time the pump was placed in suspend.

7. Press ESC to return to your HOME screen.
Practice Exercise 2: Resuming Basal Insulin Delivery

1. Press **Act** from the HOME screen. RESUME flashes on the screen.

   ![Screen with RESUME and ACT Restart Basal]

2. Press **Act** to confirm that you want to resume basal delivery.

3. Your pump will return to the HOME screen, and the pump will begin to deliver basal insulin as programmed.

   ![Screen showing the pump home screen]

*Congratulations!* You have successfully used the manual SUSPEND and RESUME functions. Notice the alarm icon (solid black circle) is no longer displayed on your pump screen.

**NOTE** Any time the pump is in manual SUSPEND, the alarm icon ☰ will remain on the front of the screen as a visual reminder. The pump will also beep or vibrate every 15 minutes as an audible reminder that your pump is in manual SUSPEND and that you are not receiving insulin.
Practice Exercise 3: Manually Suspending Your Pump While a Bolus Is Delivering

1. From the HOME screen:
   Press the ☰ to display the SET BOLUS screen.

2. Press 🔍 to set a bolus of 5.0 u (5 units).

3. Press 🟢.

4. Allow the bolus to begin to deliver, then press 🟢 again.

5. Suspend is highlighted on the MAIN MENU.

6. Press 🟢. SUSPEND flashes on the screen.

7. Press 🟢 again.

8. The pump is in manual SUSPEND, and the bolus delivery has been cancelled.

To see the exact amount of insulin that was delivered before the bolus was manually suspended, RESUME delivery and then look at the STATUS screen or go to Bolus History in the BOLUS MENU.

Congratulations! You have successfully completed your introductory training on your new MiniMed® 530G insulin pump.
Introduction to CareLink Personal Software

CareLink Personal software is a web-based program that is provided free of charge by Medtronic. This software allows you to upload the data from your pump and glucose meter to a secure website and organizes it into easy-to-read reports and charts. These reports provide an overview of how insulin, food intake and exercise affect your glucose control.

When you use the Bolus Wizard® feature on your pump, the pump tracks and records:

- Your BG meter readings
- Your carbohydrate intake
- The amount of insulin that was given for each bolus
- The time each bolus was given

Reviewing the data on these reports, allows you and your healthcare provider to identify glucose patterns and trends so you can determine if any pump settings need to be adjusted.

Set up your CareLink Personal account so you can upload your pump and meter every 2 to 3 days after you start using your pump. You and your healthcare provider will be able to review your information and adjust and fine-tune your pump settings as needed.

To set up your CareLink Personal account go to:

www.medtronicdiabetes.com/carelink

To learn more about using CareLink Personal software you can use the Getting Started with CareLink® Personal Software guide or take the myLearning course, Exploring CareLink Software and Reports. You can access this course at www.medtronicdiabetes.com and clicking on myLearning. You will need to sign in to your account (or register for an account if you do not have one) and then click on the Exploring CareLink Software and Reports course.
Frequently Asked Questions

As with learning anything new, you typically have questions. Here is a list of commonly asked questions. You may wish to make a note of any additional questions you may have to ask your Certified Product Trainer.

Where should I wear my pump?

Where and how to wear the pump is a commonly asked question among new pump users. Most individuals find that wearing an insulin pump presents no problem and that it can be worn in a variety of ways. It typically takes only a day or two to find the ways that work best for you. Below are just a few ideas to help get you started.

- Use the clip that comes with your pump and clip it to a waist band or belt
- Place the pump (with or without the clip) into the pocket of your pants
- Keep it in your shirt pocket
- Slip it into your bra with the screen facing away from your skin
- Use the longer tubing lengths and place the pump in your sock

Where can I put the pump when I sleep?

- Clip it to the waist of your pajama pants
- Clip it onto your pajama top or in a pocket
- Place it next to you in the bed, under your pillow, or on the bedside table

NOTE The pump should be placed at least 12 inches away from your cell phone to avoid interfering with glucose values being transmitted by a linked blood glucose meter.

Medtronic Diabetes offers accessories that can add to the convenience of wearing, protecting and concealing your pump. Refer to the accessories catalog or to the accessories information found on our web site at www.medtronicdiabetes.com.

What about intimacy?

What to do with the pump during intimate moments is another question that is frequently asked. An open discussion with your partner usually resolves any concerns you may have. Some individuals simply choose to leave the pump in place. Others choose to use the longer tubing which allows them to place the pump well out of reach. Another idea is to temporarily disconnect from the pump and tubing. Just remember that disconnecting from the pump for long periods of time can result in high glucose levels that could lead to DKA (diabetic ketoacidosis). So, always be sure you reconnect the pump afterwards.

Talk to your healthcare provider about a plan including BG checks and possible correction boluses when disconnecting and reconnecting to your pump.
Should the pump be removed for X-rays, CT scans, and MRIs?

Any time you have an X-ray, CT scan, MRI or any procedure involving exposure to radiation or magnetic fields, remove your pump prior to entering the radiation area or magnetic field.

Cannula infusion sets such as the Silhouette® and Mio™ can be left in place during the procedure. However, infusion sets that use a needle instead of a cannula to infuse insulin (such as the Sure-T®) must be removed prior to the procedure.

If your insulin pump is inadvertently exposed to a strong magnetic field like an MRI, discontinue use and contact our 24-Hour HelpLine at 800.646.4633.

Can the pump be worn when going through airport security?

You can wear your insulin pump while going through an airport metal detector. Medtronic has conducted official testing on the effects of the full body scanners at airports with Medtronic medical devices. Some of the new scanners may include x-ray. To avoid removing your devices, you may request an alternative screening process. If you choose to go through a full body scanner, you must remove your insulin pump and CGM (sensor and transmitter). Do not send your devices through the x-ray machine as an alternative.

Print and complete the information on an airport emergency card to carry with you.

Notify security screeners that you have diabetes, that you are wearing an insulin pump and are carrying supplies with you. Because travel rules are subject to change, it is advisable to check with the Transportation Safety Administration (TSA) before traveling. International passengers should consult their individual air carriers for international regulations. Some helpful tips regarding travel within the United States are listed on the next page.
Tips About Traveling with Insulin Pumps and Supplies

- Notify security that you have diabetes and are wearing an insulin pump. Let them know you are carrying insulin and other supplies with you.

- There is no need to remove your pump. The pump will not trigger metal detectors and the detectors will not harm your pump.

- Do not send your pump through any x-ray equipment.

- If there is any question, ask that they visually inspect the pump rather than removing it from your body. (Remember, you may ask for a private screening, if removal or lifting of clothing is required to display your pump.)

- A doctor’s letter is no longer sufficient proof of medical necessity when carrying syringes. To board with syringes and other insulin delivery devices, you must produce an insulin vial with a professional, pharmaceutical, pre-printed label that clearly identifies the medication.

- Never store insulin in checked luggage, as it may be exposed to extreme temperatures. Extreme heat or cold can cause insulin to lose its effectiveness.

- Boarding with lancets is allowed if the lancets are capped and carried along with a glucose meter that has the manufacturer’s name embossed on it.

If you encounter difficulty, ask to speak with the TSA ground security commissioner or their international equivalent. The American Diabetes Association (ADA) asks that you contact them at 1.703.549.1500 ext. 1768 should you encounter any problems.
General Travel Tips

- Pack extra supplies including reservoirs, infusion sets, batteries and ketone strips. Keep your supplies, insulin and a prescription with you, just in case your luggage is lost or your insulin becomes denatured.

- Pack glucose tablets or carbohydrate for treatment of low glucose. In case flights are delayed or canceled, pack extra food that is easy to carry, such as nutrition bars.

- If you travel outside the United States, you may want to take advantage of Medtronic’s travel loaner plan. This program allows you to take a “back-up” insulin pump with you when you travel.

Always Be Prepared

When flying in an airplane it is important that you stay connected to your pump and check your blood glucose more frequently. When traveling, make sure that you have backup syringes, vials of insulin or insulin pens (rapid-acting and long-acting insulin), and instructions from your healthcare provider should you need to return to insulin injections if your pump stops working.

It is important that you test your blood glucose (BG) more frequently while you are traveling. The routine hassle of travel, including stress, changes in time zones, schedules and activity levels, meal times and types of food, can all affect your diabetes control. Be extra attentive to monitoring your BG frequently, and be prepared to respond if needed.

For more information on traveling with a pump, go to: http://www.medtronicdiabetes.com/customer-support/traveling-with-an-insulin-pump-or-device
When should I call the 24-Hour HelpLine?

Medtronic Diabetes provides a 24-Hour HelpLine that is staffed with highly trained and skilled service technicians. These technicians are available to assist you with any technical issues or questions that you may have regarding the operation of your pump.

Examples of when you may need to call the HelpLine are:

- You are concerned that the pump is not functioning properly.
- You are reading about a pump function in the User Guide that you do not understand and need assistance.
- Your pump has alarmed and you have followed the instructions to clear the alarm and it alarms again.

The number for the HelpLine is located on the back of your pump.
When should I call my healthcare provider?

Consult your healthcare provider about when, how often, and under what circumstances you should contact them. Typically, providers review your glucose information more frequently when you first start on pump therapy. This allows them to adjust and fine-tune your pump settings. Once adjusted, most healthcare providers ask that you maintain a routine follow-up schedule. Examples of other situations that you should notify your healthcare provider about are:

Hypoglycemia (BG less than 70mg/dL)

- Any severe hypoglycemic event that requires another person's assistance to treat the low; or any event that results in loss of consciousness.

- Frequent hypoglycemia

- Hypoglycemia that occurs around the same time each day or that routinely occurs after certain activities (such as vacuuming or washing the car)

- Hypoglycemia that occurs after or during exercise

Hyperglycemia (BGs above your maximum target range or above 250 mg/dL)

- Hyperglycemia that is frequent or persistent

- Hyperglycemia that is accompanied by nausea or vomiting

- Hyperglycemia and positive ketones

- Hyperglycemia that occurs around the same time each day or routinely after a certain event (such as eating).

As always, when low or high blood sugars occur, follow the guidelines provided in the “Safety Rules Quick Reference Guide” in the Training Handouts section of this workbook.
Training Handouts

This section contains information that will be covered in your pump start training. This content is intended for post-training review only.

IMPORTANT Please DO NOT perform the steps provided in this section until you have been instructed to do so by your healthcare provider.

Pump therapy is not recommended for people with vision or hearing impairments that do not allow the ability to recognize pump signals and alarms. It is important to review the screen carefully before making selections and to not rely on hearing the “beeps”. If you hear an unexpected sound, be sure to check your pump screen.
1. From **MAIN MENU**, scroll to **Basal**. Press **ACT**.

2. Select **Basal Setup**. Press **ACT**.

3. **Set/Edit Basal** is highlighted. Press **ACT**.

4. Use **A** to set the basal rate amount. Press **ACT**.

5. Press **ACT** again to skip **SET START TIME 2**.

6. **BASAL RATE** screen appears showing the current rate (u/h); start time of rate and 24 hr. basal total.
Basal Quick-Reference Guide for the MiniMed® 530G Insulin Pump

Temporary Basal Rate

This feature allows you to immediately increase or decrease your basal rate, for the temporary period of time you set. It is used primarily for exercise and sick days as directed by your healthcare provider.

To Set the Temporary Basal Type:

1. From MAIN MENU, scroll to Basal. Press ACT.
2. Select Basal Setup. Press ACT.
3. Scroll down to Temp Basal Type. Press ACT.
4. Select Insulin Rate (U/H) or Percent of Basal. Press ACT.

To Set a Temporary Basal Rate:

1. From MAIN MENU, scroll to Basal. Press ACT.
2. Set/Edit Temp Basal is highlighted. Press ACT.
3. Use | to set duration of time. Press ACT.
4. Use arrows to SET TEMP BASAL U/H or SET TEMP BASAL %. Press ACT to start temp basal rate.
5. An open circle at top of screen and an hourly alert indicate temp basal is running.

To Cancel a Temporary Basal Rate:

1. From MAIN MENU, scroll to Basal. Press ACT.
2. Select Cancel Temp Basal. Press ACT.
3. The open circle will disappear when temp basal has been cancelled.

Note: The settings shown are for illustration purposes only — your settings will be different.

Patterns

This feature allows you to pre-program up to three different sets of basal rates so you can easily accommodate routine schedule changes (example: weekday vs. weekend; day vs. night shift, etc.).

To Turn Patterns On:

1. From MAIN MENU, scroll to Basal. Press ACT.
2. Select Basal Setup. Press ACT.
3. Select Patterns. Press ACT.
4. Select On. Press ACT.

To Program Basal Patterns:

1. From MAIN MENU, scroll to Basal. Press ACT.
2. Scroll down to Basal Setup. Press ACT.
3. Set/Edit Basal is highlighted. Press ACT.
4. Highlight Pattern A. Press ACT.
5. Use | to SET BASAL RATE 1. Press ACT.
6. Set other times and rates as needed OR press ACT.
7. BASAL RATE A screen appears. The open circle at top of screen indicates Pattern A is now running. Press ESC.
8. To set Pattern B, repeat steps 3–7.

To Choose Basal Pattern:

1. From MAIN MENU, scroll to Basal. Press ACT.
2. Scroll to Select Patterns. Press ACT.
3. Highlight the pattern you want to start. Press ACT.
To Turn the Bolus Wizard On:

1. From the MAIN MENU, select Bolus. Press Act.
5. EDIT SETTINGS screen appears. Press Act.

Continue to next section to program settings.

To Program Settings:

   Select Grams. Press Act.
   Use arrows to set Low and High Target. Press Act after each one. Press Act again to skip SET START TIME 2.
6. You will see a message that Bolus Wizard Setup is complete.

Note: The settings shown are for illustration purposes only — your settings will be different.
To Deliver a Food and Correction Bolus:

1. Press \( \text{Act} \). Test BG. If using linked meter press \( \text{Act} \). Or, use arrows to enter BG. Press \( \text{Act} \).

2. Use \( \uparrow \) to enter grams of carb. Press \( \text{Act} \).

3. Review details. Press \( \text{Act} \).

4. Confirm bolus amount (change if necessary). Press \( \text{Act} \) to deliver.

To Deliver a Correction Bolus (no food):

1. Press \( \text{Act} \). Test BG. If using linked meter press \( \text{Act} \). Or, use arrows to enter BG. Press \( \text{Act} \).

2. Leave grams of carbohydrates at zero. Press \( \text{Act} \).

3. Review details. Press \( \text{Act} \).

4. Confirm bolus amount (change if necessary). Press \( \text{Act} \) to deliver.

To Deliver a Food Bolus (no BG):

1. Press \( \text{Act} \). Leave the Enter BG screen as dashes. Press \( \text{Act} \).

2. Use \( \uparrow \) to enter grams of carb. Press \( \text{Act} \).

3. Review details. Press \( \text{Act} \).

4. Confirm bolus amount (change if necessary). Press \( \text{Act} \) to deliver.

To Review Bolus History:

1. Press \( \text{Act} \). Select Bolus. Press \( \text{Act} \).

2. Select Bolus History. Press \( \text{Act} \).

3. Use arrows to review boluses given.

To Edit Bolus Wizard Settings:

1. Press \( \text{Act} \). Select Bolus. Press \( \text{Act} \).

2. Scroll to Bolus Setup. Press \( \text{Act} \).

3. Highlight Bolus Wizard Setup. Press \( \text{Act} \).

4. Highlight Edit Settings. Press \( \text{Act} \).

5. Select the setting to be changed. Press \( \text{Act} \).

6. Change value. Press \( \text{Act} \).

7. Repeat steps 5 and 6 to edit other Bolus Wizard settings.

To Review Bolus Wizard Settings:

1. Press \( \text{Act} \). Select Bolus. Press \( \text{Act} \).

2. Scroll to Bolus Setup. Press \( \text{Act} \).

3. Highlight Bolus Wizard Setup. Press \( \text{Act} \).

4. Highlight Review Settings. Press \( \text{Act} \).

5. Scroll down to review.

Note: The settings shown are for illustration purposes only — your settings will be different.
Your MiniMed 530G Insulin Pump can deliver three types of boluses: Normal, Square Wave and Dual Wave.

**Normal Bolus**
- The bolus amount delivers as soon as the Act button is pressed.
- Primarily used for meals that contain average fat and carb content.
- Also used to deliver correction boluses.

**Square Wave Bolus**
- The bolus amount delivers evenly over the period of time you set.
- Primarily used by those who have delayed digestion (gastroparesis).
- Can be set in 30 minute increments from 30 minutes up to 8 hours.
- Can also be used when eating small amounts of carb over an extended period of time, such as at receptions or parties.

**Dual Wave Bolus**
- The bolus amount is split. Part of the bolus delivers as soon as Act is pressed (Normal) and the remainder delivers evenly over the period of time you set (Square Wave).
- Primarily used for meals that are both high in carbs and fat, which may delay digestion (for example: pizza, Chinese or Mexican food).
- Percent you set to deliver now and as a Square Wave bolus will vary based on the meal content.

**To Turn On Dual/Square Wave Bolus Option:**

1. From the MAIN MENU, select Bolus. Press Act.

*Note: The settings are shown with the Bolus Wizard® feature turned on.*
**To Deliver a Square Wave Bolus:**

1. Press \( \text{Act} \). Test BG. If using linked meter press \( \text{Act} \). Or, use arrows to enter BG. Press \( \text{Act} \).

2. Use \( \text{A} \) to enter grams of carb. Press \( \text{Act} \).

3. Review details. Press \( \text{Act} \).

4. Select Square Wave Bolus. Press \( \text{Act} \).

5. Confirm bolus amount (change if necessary). Press \( \text{Act} \).

6. Use \( \text{A} \) to set duration of time. Press \( \text{Act} \) to begin bolus delivery.

7. An open circle at top of screen and an hourly alert indicate bolus is delivering.

8. If your BG is above target, this type of bolus is not an option — use the Dual Wave option instead.

**Note:** The screens shown are with the Bolus Wizard turned on and are for illustration purposes only — your values will be different.

**To Deliver a Dual Wave Bolus:**

1. Press \( \text{Act} \). Test BG. If using linked meter press \( \text{Act} \). Or, use arrows to enter BG. Press \( \text{Act} \).

2. Use \( \text{A} \) to enter grams of carb. Press \( \text{Act} \).

3. Review details. Press \( \text{Act} \).

4. Select Dual Wave Bolus. Press \( \text{Act} \).

5. Confirm bolus amount (change if necessary). Press \( \text{Act} \).

6. Use \( \text{A} \) to change amount or \( \% \) for Now and Square. Press \( \text{Act} \).

7. Use \( \text{A} \) to set the duration of time for the Square Wave. Press \( \text{Act} \) to begin bolus delivery.

8. An open circle at top of screen and an hourly alert indicate bolus is delivering.
To Fill the Reservoir:

1. Remove the reservoir from the package.

2. Pull the plunger down to fill the reservoir with air.

3. Wipe the top of the insulin vial with alcohol. Hold the blue transfer guard and press it down onto the insulin vial.

4. Push down on the plunger to push air from the reservoir into the vial. Continue to hold the plunger down.

5. Flip the vial over so it is now on top. Slowly pull the plunger down to fill the reservoir.

6. Check the reservoir for air bubbles. Tap the side of the reservoir to force any bubbles to rise to the top. Push the plunger up to move the air bubbles from the reservoir into the insulin vial.

7. After the air bubbles are removed, slowly pull the plunger down to fill the reservoir with enough insulin to last 2-3 days.

8. To avoid getting insulin on the top of the reservoir, flip the vial over, so the vial is upright. Hold the transfer guard, and turn the reservoir counterclockwise. Pull the reservoir straight up to disconnect it from the transfer guard. Discard the transfer guard into a sharps container.

WARNING: If insulin, or any liquid, gets inside the tubing connector, it can temporarily block the vents that allow the pump to properly fill the infusion set. This may result in the delivery of too little or too much insulin, which can cause hypoglycemia or hyperglycemia. To prevent insulin from getting inside the tubing connector of the Quick-set infusion set, after you fill the reservoir make sure you hold the insulin vial upright when you remove the reservoir from the transfer guard. If you do not hold the insulin vial upright, insulin can get on the top of the reservoir and could transfer liquid into the tubing connector. For more information, please see “Tubing Connector”, located in the Introduction chapter of the MiniMed 530G System User Guide.

To Rewind the Piston in the Pump:

1. Wash your hands. Remove the old infusion set from your body and the reservoir from the pump.

2. Select Reservoir + Set in the MAIN MENU, then select Reservoir Setup to open theREWIND screen. Press ACT to rewind.
1. Remove the Quick-set from the package.

2. Make sure the top of the reservoir is dry. Gently push the tubing connector onto the top of the reservoir and turn it clockwise until it slides and locks into place.

3. Tap the side of the reservoir to force any remaining air bubbles to rise to the top. Push up on the plunger until the bubbles are out and you see insulin in the tubing.

4. Turn the plunger counter-clockwise to unscrew it from the reservoir. Be careful not to pull the plunger before it is disconnected, or insulin will spill out.

5. If you see drops at the end of the needle and there are no air bubbles in the tubing, select Yes and press \( \text{Act} \).

6. When the FILL CANNULA screen appears, you are ready to insert the Quick-set infusion set.

---

**Important:** Never fill tubing while you are connected to the pump.
**To Load the Quick-set® into the Insertion Device:**

1. Place the blue hub of the Quick-set into the Quick-serter insertion device. The hub handle and tubing should be lined up with the tubing slot on the Quick-serter.

2. Use two fingers to seat the Quick-set inside the serter securely. Do not push the Quick-set all the way down. Be careful not to press the blue button or the Quick-set will not lock inside the serter.

3. Peel the paper from the adhesive.

4. Pull the blue button down until you hear it click. Be careful not to press the white buttons on either side of the serter.

**To Insert the Quick-set® Infusion Set:**

1. Wipe the selected insertion site with alcohol or other antiseptic wipe.

2. Turn the needle guard to loosen it and lift it away to expose the needle.

3. Hold the serter against the prepared site on your body.

4. Press the two white buttons at the same time. If they are not pressed at the same time the Quick-set will not insert properly.

5. Press down the blue button of the serter to release the Quick-set.

6. Pull serter away from your body. Press the adhesive securely against your skin.

**Choose Your Insertion Site:**

The best areas of the body to insert the infusion set are shown in the shaded areas of this drawing. Follow your healthcare provider's instructions on where to insert your infusion sets.
Changing the **MiniMed® Quick-set® Infusion Set**

**To Insert the Quick-set® Infusion Set:**

7. With one hand, place your fingers on the Quick-set. With the other hand, pull the blue hub straight out to remove the insertion needle.

8. Fold the hub handle in half until it locks into place. Dispose into a sharps container.

**To Fill the Cannula:**

1. If the pump has returned to **HOME** screen, press **ACT**. On the **FILL CANNULA** screen, press **ACT**.

2. If you are using a 6mm cannula, press **A** to enter 0.3 units of insulin. Press **ACT**.

   Or, if you are using a 9mm cannula, press **A** to enter 0.5 units of insulin. Press **ACT**.

   **Note:** Fill Cannula is to fill the empty cannula after the insertion needle has been removed. The tubing is already filled.
**Glucose Monitoring**

**Schedule for Adjusting Pump Settings**

When first starting pump therapy or any time pump settings need adjusting:

- Check your glucose (BG)
  - When you wake up
  - Before each meal
  - 2 hours after each meal
  - Bedtime
  - Mid-sleep or every 3–4 hours during sleep
- Do not eat between meals.

Checking BGs at these times provides the information needed to adjust and fine-tune pump settings as directed by your healthcare provider.

**Schedule for Routine Monitoring**

Once your pump settings are adjusted correctly and your glucose levels are stable, establish a routine that includes always checking your BG:

- When you wake up
- Before each meal
- Bedtime
- Occasionally mid-sleep
- Test more frequently during travel, times of stress, and illness

---

**Treating Low Blood Glucose Levels**

**How to Treat Mild/Moderate Lows**

1. Eat 15 grams of fast-acting carbohydrate
2. Re-check BG in 15 minutes
3. If BG is still below 70 mg/dL, repeat Steps 1 & 2 every 15 minutes until BG is within range.

**Items that contain 15 grams:**
- 3 to 4 glucose tablets
- 5 jelly beans
- 4 oz juice or soda (not diet)
- 8 oz milk (low or non-fat)
- 1 Tbsp sugar or honey

**How to Treat a Severe Low**

Keep a Glucagon Emergency Kit on hand in case a severe low occurs. Glucagon can be given by injection to raise glucose levels if you are unable to eat or drink to treat a low, or if you are unconscious.

A family member, co-worker, or friend should be instructed on how to give glucagon.

**Note:** If you are using continuous glucose monitoring (CGM), do not rely on sensor glucose values for making treatment decisions or the Threshold Suspend feature to prevent or treat a low blood glucose.
# Treating High Blood Glucose Levels

Most highs can be easily lowered simply by giving a correction bolus. Follow your healthcare provider's instructions for correcting high blood glucose and testing for ketones.

<table>
<thead>
<tr>
<th>General Guidelines: If BG is High but is lower than 250 mg/dL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Enter the BG reading into your pump.</td>
</tr>
<tr>
<td>2. Allow the Bolus Wizard® feature to calculate the correction bolus amount.</td>
</tr>
<tr>
<td>3. Confirm the bolus amount and press the ACT button to deliver.</td>
</tr>
<tr>
<td>4. Recheck your BG in one hour and again each hour until your BG is back within target range.</td>
</tr>
</tbody>
</table>

Never ignore high BG readings. Always consult the Bolus Wizard to see if a correction bolus should be taken.

<table>
<thead>
<tr>
<th>General Guidelines: If BG is Higher than 250 mg/dL — CHECK FOR KETONES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>If ketone test is negative:</strong></td>
</tr>
<tr>
<td>1. Enter BG into pump/consult Bolus Wizard to see if correction dose is needed</td>
</tr>
<tr>
<td>• Use pump to give correction dose</td>
</tr>
<tr>
<td>2 Recheck BG in 1 hour</td>
</tr>
<tr>
<td>• If BG is starting to decrease, continue to monitor until normal.</td>
</tr>
<tr>
<td>• If BG is same or higher:</td>
</tr>
<tr>
<td>– Give correction dose using a syringe.</td>
</tr>
<tr>
<td>– Change infusion site, infusion set, reservoir, and insulin.</td>
</tr>
<tr>
<td>– Continue to check BG every hour until BG returns to normal.</td>
</tr>
</tbody>
</table>

| **If ketone test is positive:**                                         |
| 1. Take correction dose using a syringe.                                |
| 2. Change infusion site, infusion set, reservoir, and insulin.          |
| 3. Troubleshoot pump.                                                   |
| 4. Check BG every 1 to 2 hours. Give correction boluses as needed.      |
| 5. Drink non-carbohydrate fluids.                                       |
| 6. If BG continues to rise or if you have moderate to high ketones, nausea, vomiting, or difficulty breathing, notify physician or go to the nearest emergency room. |

# DKA Prevention

<table>
<thead>
<tr>
<th>Sick Day Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Illness and/or infection usually cause BGs to run higher than normal. Therefore, the risk of developing DKA is increased when you are ill.</strong></td>
</tr>
</tbody>
</table>

Because DKA symptoms are similar to flu and stomach virus symptoms, check your BG and monitor for ketones often during illness.

- Check BG every 2 hours or as directed by your healthcare provider
- Check urine or blood for ketones as directed by your healthcare provider
- **Immediately** check ketones if you have nausea, vomiting, or abdominal pain

- Notify doctor if ketones are positive, if you are unable to keep food down, or if no improvement within a few hours. Give a correction dose of insulin with a syringe according to your healthcare provider’s recommendations and change infusion set and reservoir.

## Check for Ketones

Follow the instructions in your ketone testing kit.

Unexplained highs that do not decrease with a correction bolus may be caused by a dislodged or kinked infusion set or a weak vial of insulin.
Appendix: Alerts and Alarms

Alerts
If the pump is operating and delivering insulin using a special feature or condition such as a temporary basal setting, low battery, or low reservoir volume, it will beep or vibrate to remind you that it is operating in the Special mode (an open circle will appear on the pump screen).

Low Reservoir
INSULIN REMAINING IN RESERVOIR IS LOW. Change as soon as possible.

Low Battery
LESS THAN 10% BATTERY LIFE LEFT. Replace as soon as possible, always before going to sleep.

Clearing Alerts and Alarms
When your pump beeps or vibrates notifying you that an alert condition exists, read and follow the instructions on the screen. Press ESC, then ACT to silence an alert. Check the STATUS screen to determine what caused the alert.

Alarms
Your pump has a sophisticated network of safety checks and systems. If the pump is not delivering insulin because it has been placed in manual suspend or another condition has caused the pump to stop (such as Threshold Suspend), the pump will sound an alarm or vibrate periodically to notify you that you are not receiving insulin. A closed black circle will appear on the screen as a reminder of this condition. Note: To learn more about Threshold Suspend, please see Getting Started with Continuous Glucose Monitoring for the MiniMed 530G with Enlite.

Weak Battery
BATTERY NOT FULLY CHARGED. After clearing alarm, pump will continue to deliver insulin, but battery life will be shorter than normal.

Empty Reservoir
CHANGE THE RESERVOIR immediately.

Failed Battery Test
BATTERY TOO WEAK TO OPERATE PUMP. Install a new battery.

No Delivery
BLOCKAGE or EMPTY RESERVOIR DETECTED: insulin delivery stopped. Check blood glucose and ketones. Change reservoir and infusion set if reservoir is empty or infusion set or tubing is kinked/dislodged. If alarm occurs again, call Medtronic for assistance.
# Possible Battery Problems

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank Screen</td>
<td>Check and make sure that the battery is inserted correctly.</td>
</tr>
<tr>
<td></td>
<td><em>Remember, the negative (flat) end must be facing down in the pump.</em></td>
</tr>
<tr>
<td>Weak Battery</td>
<td>• You may have inserted a battery that has been used for a short time.</td>
</tr>
<tr>
<td></td>
<td>• You can clear this message and continue, but the battery may not last as long as a new battery.</td>
</tr>
<tr>
<td></td>
<td>• Clear the alert by pressing the <code>ESC</code> button, and then the <code>ACT</code> button.</td>
</tr>
<tr>
<td></td>
<td>• The HOME screen should appear.</td>
</tr>
<tr>
<td></td>
<td><em>Remember, if this occurs, the pump will operate normally but the battery life may be shorter than expected.</em></td>
</tr>
<tr>
<td>Failed Battery Test</td>
<td>Replace the battery. Occasionally new batteries are damaged.</td>
</tr>
<tr>
<td></td>
<td>If you still do not see the HOME screen, call Medtronic’s 24-Hour HelpLine (800.646.4633) for assistance. We are available to assist you 24 hours a day.</td>
</tr>
<tr>
<td></td>
<td><em>Remember, you will need to provide your pump’s serial number. Your pump’s serial number can be found in the pump’s STATUS screen or on the back of your pump.</em></td>
</tr>
</tbody>
</table>
Appendix: Expanded Menu Map

Main Menu:
- BOLUS
- SUSPEND
- SENSOR
- CAPTURE EVENT
- BASAL
- RESERVOIR SET
- UTILITIES

Bolus Menu:
- SET BOLUS
- USE BOLUS WIZARD
- MANUAL BOLUS
- BOLUS HISTORY
- BOLUS SETUP
  - Bolus Wizard Setup
  - Edit Settings
    - Wizard
    - Carb Units
    - Carb Ratios
    - Sensitivity
    - BG Target
    - Active Ins Time
    - Review Settings
  - Max Bolus
  - Max Bolus Setup
  - Scroll Rate
  - Scroll Rate Setup
  - Dual/Square Bolus
  - Off
  - On
  - Easy Bolus
    - Off
    - On/Set
  - BG Reminder
    - Off
    - On
  - Missed Bolus Reminder
    - Off
    - On/Set

Sensor Menu:
- CALIBRATE
  - Enter BG
- ALERT SILENCE
  - Off
  - Hi Alerts
  - Lo Alerts
  - Hi and Lo Alerts
  - All Sensor Alerts
- LINK TO SENSOR
  - New Sensor
  - Reconnect Old Sensor
  - Find Lost Sensor
  - Turn Off Sensor
  - Transmtr ID

Edit Settings:
- Sensor
- Glucose Alerts
- Glucose Limits
- Hi Repeat
- Lo Repeat
- Predict Alert
- Rate Alerts
- Threshold Suspend
- Cal Repeat
- Cal Reminder
- Transmtr ID
- Weak Signal
- Graph Timeout
- Sensor Demo

Calibration History

Sensor Alert History

Review Settings

Turn Off Sensor

Utilities

NOTE: All screens are samples only. Actual screens depend on the current active functions. Blue Arrows (►) indicate submenus.

1 Displays only when the Bolus Wizard feature is off.
2 Displays only when the Bolus Wizard feature is on.
3 Displays when the sensor is communicating with the pump.
4 Displays if Sensor is on.
5 Displays if Glucose Alerts feature is on.
Status Screens
Press the button to go to the SENSOR STATUS screen.

Pump Status Screen

Sensor Status Screen

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* Displays if Capture Option is turned on in Utilities Menu.
* Displays only after setting Temp Basal.
* Displays only when the Patterns feature is on.
* Displays only after a rewind.
* Displays only when you hold and press Act.
* Displays only after the patient settings have been saved.